

**REMARKS:**

Claims 1-16 are currently pending in the application.

Claims 1-16 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,689,652 to Lupien et al. ("*Lupien*").

The Applicant respectfully submits that all of the Applicant's arguments and amendments are without *prejudice* or *disclaimer*. In addition, the Applicant has merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, the Applicant reserves the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. The Applicant further respectfully submits that by not responding to additional statements made by the Examiner, the Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by the Applicant are considered sufficient to overcome the Examiner's rejections. In addition, the Applicant reserves the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

**CLAIM OBJECTIONS:**

The Applicant thanks the Examiner for withdrawing the objection to Claims 1-16 for certain informalities.

**REJECTION UNDER 35 U.S.C. § 102:**

Claims 1-16 stand rejected under 35 U.S.C. § 102(b) over *Lupien*.

The Applicant respectfully submits that ***the amendments to independent Claim 1 has rendered moot the Examiner's rejection of claims 1-16 and the Examiner's arguments in support of the rejection of these claims.*** The Applicant further respectfully submits that independent Claim 1 in its current amended form contain unique and novel limitations that are not disclosed, suggested, or even hinted at in *Lupien*. The

Applicant further respectfully submits that Claims 1-16 patentably distinguish over *Lupien*. Thus, the Applicant respectfully traverses the Examiner's rejection of Claims 1-16 under 35 U.S.C. § 102(b) over *Lupien*.

***Lupien* Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicant's Claims**

For example, with respect to amended independent Claim 1, this claim recites:

A method for ***optimizing prices at which products are sold in an automated marketplace***, comprising:

generating a matrix of all possible buyers and sellers for a product;

for each buyer, providing a ***buyer's reserve price corresponding to a maximum purchase price for each possible seller***;

for each seller, providing a ***seller's reserve price corresponding to a minimum sales price for each possible buyer***;

***calculating a utility value for each pairing of buyers and sellers***, wherein ***the utility value is a linear utility value corresponding to the difference between each buyer's reserve price and each seller's reserve price***;

selecting a unique pairing of buyers and sellers that ***maximizes total utility***;

calculating a buyer optimal allocation of the total utility for all buyers and sellers in a ***stable manner***;

calculating a seller optimal allocation of the total utility for all buyers and sellers in a ***stable manner***; and

for each pair in the unique pairing, selecting a transaction price that allocates the utility between that seller and that buyer. (Emphasis Added).

In addition, *Lupien* fails to disclose each and every limitation of independent Claim 13.

The Applicant respectfully maintains that *Lupien* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding a “method for ***optimizing prices at which products are sold in an automated marketplace***” and in particular *Lupien* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding “for each buyer, providing a ***buyer's reserve price corresponding to a maximum purchase price for each possible seller***” and “for each seller, providing a ***seller's reserve price corresponding to a minimum sales price for each possible buyer***”. In particular, the

Examiner equates the “**reserve price**” recited in amended independent Claim 1 with “**but under no circumstances is willing to sell any quantity at \$70.25**” and “**but under no circumstances is willing to buy any quantity at \$24**” disclosed in *Lupien*. (24 August 2007 Final Office Action, Pages 4-5).

In addition, not only does *Lupien* fail to teach, suggest, or even hint at Applicant’s claimed invention, but ***Lupien actually teaches away from Applicant’s Claimed invention***. The Applicant respectfully submits that, as acknowledged by the Examiner, the “**under no circumstances**” disclosure of *Lupien* makes clear that “**under no circumstances**” is the buyer or seller of *Lupien* willing to sell or buy above or below a set value. In addition, the “**under no circumstances**” disclosure of *Lupien* **does not include, involve, or even relate to the reserve price**, as recited in amended independent Claim 1. (Column 11, Line 55 through Column 12 line 14 and Column 3, Lines 54-67).

In contrast, the “**buyers reserve price**” recited in amended independent Claim 1 corresponds to a “**maximum purchase price for each possible seller**” and the “**sellers reserve price**” recited in amended independent Claim 1 corresponds to a “**minimum sales price for each possible buyer**”. Thus, the Applicant respectfully submits that the equations forming the foundation of the Examiner’s comparison between *Lupien* and amended independent Claim 1 cannot be made. The Applicant further respectfully submits that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Lupien*.

The Applicant further respectfully submits that *Lupien* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding “**calculating a utility value for each pairing of buyers and sellers**, wherein **the utility value is a linear utility value corresponding to the difference between each buyer’s reserve price and each seller’s reserve price**” and “**selecting a unique pairing of buyers and sellers that maximizes total utility**”. In particular, the Examiner equates the “**utility value**” recited in amended independent Claim 1 with the “**mutual satisfaction**” disclosed in *Lupien*. (24 August 2007 Final Office Action, Page 5). However, the “**mutual satisfaction**” disclosed in *Lupien* merely represents the potential for that particular buy/sell pair mutually to satisfy

each side, **but does not include, involve, or even relate to the utility value or maximizing total utility**, as recited in amended independent Claim 1. (Column 9, Lines 20-30). In contrast, a “**utility value**” recited in amended independent Claim 1 **is calculated for each pairing of buyers and sellers**, wherein **the utility value is a linear utility value corresponding to the difference between each buyer’s reserve price and each seller’s reserve price** and in addition, a unique pairing of buyers and sellers is selected that **maximizes total utility**.

The Applicant respectfully submits that a prior art reference (here *Lupien*) anticipates the claimed invention under 35 U.S.C. § 102 **only if each and every element of a claimed invention is identically shown** in that single reference (here *Lupien*). MPEP § 2131. (Emphasis Added). With respect to the subject Application, *Lupien* fails to identically disclose a “**utility value**” that is a “**is a linear utility value corresponding to the difference between each buyer’s reserve price and each seller’s reserve price**” and in addition, a unique pairing of buyers and sellers is selected that **maximizes total utility**. In fact, the *Lupien* fails to teach, suggest, or even hint at a “**linear utility value**”, as recited in amended independent Claim 1. Thus, the Applicant respectfully submits that the Office Action has failed to establish a *prima facie* case of anticipation of amended Independent Claim 1 under 35 U.S.C. § 102 with respect to *Lupien* because *Lupien* fails to identically disclose the “**utility value**”, as recited in independent Claim 1. The Applicant further respectfully submits that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Lupien*.

The Applicant still further respectfully submits that *Lupien* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding “for each pair in the unique pairing, **selecting a transaction price that allocates the utility between that seller and that buyer**”, that is “calculating a buyer optimal allocation of the total utility for all buyers and sellers in a **stable manner**” and “calculating a seller optimal allocation of the total utility for all buyers and sellers in a **stable manner**”. In particular, the Examiner equates the “**transaction price**” recited in amended independent Claim 1 with the “**cross product**” disclosed in *Lupien*. (24 August 2007 Final Office Action, Page 2). However, the “**cross product**” disclosed in *Lupien* merely represents the

degree to which that buy/sell pair can satisfy each other, **and does not include, involve, or even relate to the utility between that seller and that buyer.** (Column 4, Lines 10-27). In contrast, the “**transaction price**” recited in amended independent Claim 1 **is selected for each pair in the unique pairing** and the “**transaction price**” is selected such that the “**transaction price**” **allocates the utility between that seller and that buyer.** In addition, the optimal allocation of the total utility is calculated in a “**stable manner**”, that is the **solution is stable** and neither the buyer or seller can do any better by changing the pairing to some other buyer/seller. Thus, the Applicant respectfully submits that the equations forming the foundation of the Examiner’s comparison between *Lupien* and amended independent Claim 1 cannot be made. The Applicant further respectfully submits that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Lupien*.

#### **The Office Action Fails to Properly Establish a *Prima Facie* case of Anticipation over *Lupien***

The Applicant respectfully submits that the allegation in the present Office Action that *Lupien* discloses all of the claimed features is respectfully traversed. Further, it is noted that the Office Action provides no concise explanation as to how *Lupien* is considered to anticipate all of the limitations in Claims 1-16. **A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if each and every element of a claimed invention is identically shown in that single reference.** MPEP § 2131. (Emphasis Added). With respect to the subject application, the Examiner has not adequately supported the rejection under 35 U.S.C. § 102, because the Examiner has not shown how each and every element of the Applicant claimed invention is identically shown in *Lupien*. For example, the Examiner asserts that the **buyers and sellers “reserve price”**, in amended independent Claim 1 is somehow equivalent to the “**under no circumstances**” disclosure of *Lupien*. (24 August 2007 Final Office Action, Pages 4-5). The Applicant respectfully disagrees and further respectfully requests clarification as to how the Examiner arrives at this conclusion.

The Applicant respectfully points out that "it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." Ex parte Levy, 17 U.S.P.Q.2d (BNA) 1461, 1462 (Pat. & Tm. Off. Bd. Pat. App. & Int. 1990). The Applicant respectfully submits that ***the Office Action has failed to establish a prima facie case of anticipation in Claims 1-16 under 35 U.S.C. § 102 with respect to Lupien because Lupien fails to identically disclose each and every element of the Applicant claimed invention, arranged as they are in Applicant claims.***

### **The Applicant's Claims are Patentable over *Lupien***

The Applicant respectfully submits that independent Claim 13 is considered patentably distinguishable over *Lupien* for at least the reasons discussed above in connection with amended independent Claim 1.

Furthermore, with respect to dependent Claims 2-12 and 14-16: Claims 2-12 depend from amended independent Claim 1 and Claims 14-16 depend from independent Claim 13 are also considered patentably distinguishable over *Lupien*. Thus, dependent Claims 2-12 and 14-16 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

Thus, for at least the reasons set forth herein, the Applicant respectfully submits that independent Claims 1 and 13 and dependent Claims 2-12 and 14-16 are not anticipated by *Lupien*. The Applicant further respectfully submits that independent Claims 1 and 13 and dependent Claims 2-12 and 14-16 are in condition for allowance. Thus, the Applicant respectfully requests that the rejection of Claims 1-16 under 35 U.S.C. § 102(b) be reconsidered and that Claims 1-16 be allowed.

### **THE LEGAL STANDARD FOR ANTICIPATION REJECTIONS UNDER 35 U.S.C. § 102:**

The following sets forth the legal standards for "anticipation."

The events that can lead to anticipation can be divided into the following seven categories, all defined by statute:

1. Prior Knowledge: The invention was publicly known in the United States before the patentee invented it.
2. Prior Use: The invention was publicly used in the United States either (i) before the patentee invented it; or (ii) more than one year before he filed his patent application.
3. Prior Publication: The invention was described in a printed publication anywhere in the world either (i) before the patentee invented it; or (ii) more than one year before he filed his patent application.
4. Prior Patent: The invention was patented in another patent anywhere in the world either (i) before the patentee invented it; or (ii) more than one year before he filed his application.
5. On Sale: The invention was on sale in the United States more than one year before the patentee filed his application.
6. Prior Invention: The invention was invented by another person in the United States before the patentee invented it, and that other person did not abandon, suppress or conceal the invention.
7. Prior U.S. Patent: The invention was described in a patent granted on a patent application filed in the United States before the patentee made the invention.

Each of those seven events has its own particular requirements, but they all have the following requirements in common:

1. Anticipation must be shown by clear and convincing evidence.
2. If one prior art reference completely embodies the same process or product as any claim, the product or process of that claim is anticipated by the prior art, and that

claim is invalid. To decide whether anticipation exists, one must consider each of the elements recited in the claim and determine whether all of them are found in the particular item alleged to be anticipating prior art.

3. There is no anticipation unless every one of those elements is found in a *single* prior publication, prior public use, prior invention, prior patent, prior knowledge or prior sale. One may not combine two or more items of prior art to make out an anticipation. One should, however, take into consideration, not only what is expressly disclosed or embodied in the particular item of prior art, but also what inherently occurred in its practice.

4. There cannot be an accidental or unrecognized anticipation. A prior duplication of the claimed invention that was accidental, or unrecognized, unappreciated, and incidental to some other purpose is not an invalidating anticipation.

Those four requirements must be kept in mind and applied to each kind of anticipation in issue. The following additional requirements apply to some categories of anticipation.

1. Prior Knowledge: An invention is anticipated if it was known by others in the United States before it was invented by the patentee. "Known," in this context, means known to the public. Private knowledge, secret knowledge or knowledge confined to a small, limited group is not necessarily an invalidating anticipation. Things that were known to the public only outside the United States are not invalidating anticipation.

2. Prior Use: An invention is anticipated if it was used by others before it was invented by the patentee, or more than one year before the patentee filed his patent application. "Use," in this context, means a public use.

3. Prior Publication: A patent is invalid if the invention defined by the claims was described in a printed publication before it was invented by the patentee or more than one year prior to the filing date of his application. For a publication to constitute an anticipation of an invention, it must be capable, when taken in conjunction with the knowledge of people of ordinary skill in the art, of placing the invention in the possession



of the reader. The disclosure must be enabling and meaningful. In determining whether the disclosure is complete, enabling, and meaningful, one should take into account what would have been within the knowledge of a person of ordinary skill in the art at the time, and one may consider other publications that shed light on the knowledge such a person would have had.

4. Prior Patent: If the invention defined by the claims was patented in the United States or a foreign country, either before it was invented by the inventor or more than one year before the inventor filed his patent application, then the invention was anticipated. The effective date for this type of anticipation is the date on which two things co-existed: (i) the owner of the referenced patent had the right to enforce that patent; and (ii) the reference patent was available to the public. What was "patented" in the reference patent is determined by what is defined by its claims, interpreted in the light of the general description.

5. On Sale: A patent is invalid if the invention claimed in it was on sale in the United States more than one year prior to the application filing date.

6. Prior Invention: If the invention defined by the claims was invented by another person, in the United States, before it was invented by the inventor, and that other person did not abandon, suppress, or conceal the invention, the invention lacks novelty. A prior invention, even if put in physical form and shown to produce the desired result, is not an invalidating anticipation unless some steps were taken to make it public. However, it is not necessary that the inventor had knowledge of that prior invention.

7. Prior U.S. Application: A patent is invalid for lack of novelty if the invention defined by the claims was described in a United States patent issued on a patent application filed by another person before the invention was made by the inventor. The effective date of a prior application for purposes of this issue is the date on which it was filed in the United States. Foreign-filed patent applications do not apply. If the issued United States patent claims the benefit of more than one United States application, its effective date as an anticipation is the filing date of the first United States application that discloses the invention claimed in that referenced patent.

Experimental Use Exception: The law recognizes that it is beneficial to permit the inventor the time and opportunity to develop his invention. As such there is an "experimental use" exception to the "public use" and "on sale" rules. Even though the invention was publicly used or on sale, more than one year prior to the application filing date, that does not invalidate the patent, provided the principal purpose was experimentation rather than commercial benefit. If the primary purpose was experimental, it does not matter that the public used the invention or that the inventor incidentally derived profit from it.

When a public use or sale is shown, the burden is on the inventor to come forward with evidence to support the experimental use exception. Only experimentation by or under the control of the inventor qualifies for this exception. Experimentation by a third party, for its own purposes, does not qualify for this exception. Once the invention leaves the inventor's control, its use is a public one, even if further experimentation takes place.

The experimentation must relate to the claimed features of the invention. And it must be for the purpose of technological improvement, not commercial exploitation. If any commercial exploitation does occur, it must be merely incidental to the primary purpose of experimentation. A test done primarily for marketing, and only incidentally for technological improvement, is a public use.

**CONCLUSION:**

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) is being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee, to Deposit Account No. 500777.** Although the Applicant believes no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777.** If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777.**

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

29 October 2007  
Date

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